RAJYA SABHA

Thursday, the 5th March, 1987/14 *Phalguna,* 1908 *(Saka)*

The House met at eleven of the clock. Mr. Chairman in the Chair

ORAL ANSWERS TO QUESTIONS

Setting up of a Non-Resident Indians Polysilicon Production unit

*121. SHRI KRISHNA KUMAR BIRLA: Will the PRIME MINISTER be pleased to state:

(a) whether Government propose to set up a Pennsylvania based Non-Resident Indians' export oriented unit in the country to produce hyperpure polysilicon;

(b) if so, whether any decision has been taken in this regard; and

(c) if so, what are the details thereof, stating the cost involved and how does lit differ from the Hemlock technology; considered to be competitive with the best polysilicon Production Technology internationally?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE DEPARTMENTS OF OCEAN DEVELOPMENT, ATOMIC ENERGY, ELECTRONICS AND SPACE (SHRI K. R. NARAYANAN): (a) to (c) A proposal by NRI party for putting up a lOO per cent export oriented unit is under the consideration of Government.

SHRI KRISHNA KUMAR BIRLA: Mr. Chairman, Sir, purely because a particular project happens to be a hundred per cent export-oriented unit, it should not lead us to permit Installation of the plant. If, otherwise, the plant is not a viable one.

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In all these matters, what happens is that plenty of amount is incurred by way of rupee expenditure and in case the project is not viable, some one suffers. The people who suffe are usually the local people, the people in India. I understand, the plant which is proposed to be purchased is from a company called MOTOROLA INC. It is a secondhand plant which has been closed down for the last two years. It is not in a working condition and has given lot of troubles. My question is, whether all these factors have been taken into account, when the Government is considering the matter all the important features which I have pointed out.

SHRI K. R. NARAYANAN: The question of approval of the plant is at present with the Board of Approval of the Ministry of Com-
j merce. I entirely agree with the hon. Member, that we could -not merely because it is a hundred per cent export-oriented unit and also because we need foreign exchange, -accept this proposal. We are looking into all the aspects mentioned by the hon. Member, including the techno-economic viability of the plant, the indigenous demand, the market tie-up and the foreign exchange aspect. All these will be taken ino account before we take
I a "decision in accepting this offer.

MR. CHAIRMAN: Second Supplementary.

SHRI KRISHNA KUMAR BIRLA: I No second supplementary, Sir.

SHRIVISHWA BANDHU GUPTA: j Mr. Chairman, Sir, I understand that is all such collaborations, there is a certain percentage of the material produced, say 15 per cent.

which is permitted to be sold in the domestic market. Is this likely to bring down the price of solar cells

in Tndia? Secondly, what is our experience in regard to such hundred pep cent export-oriented units? Have they been viable? Have they been very good for the country or not?

SHRI K. R. NARAYANAN: It ir true that under the hundred per cent export agreement, certain percentage, I think, around 20-25 per cent, of the product can be sold in the domestic market. It will be sold as if it is imported from outside observing all the regulations concerning imports, which means that all physical or fiscal controls can be brought in in order to check this import, if you do not want this product to be imported. As regards the general functioning and advantage flowing from the hundred per cent export-oriented units, they have been generally satisfactory.

PROF. B. RAMACHANDRA RAO: Sir, I understand, this ultra-pure polisilicon proposed to be manufactured by the non-resident company would be useful for two things. One lis, for using it later to crystalise it into normal solar cells or to produce what are called amorphous silicon solar cells which are cheaper now. The price of amorphous silicon solar cells is coming down rapidly as to efficiency of cost ratio is going up. I would like to know whether, when such units are coming up Iike the NRI unit proposed to the Bombay Santa Cruze, Zone the Indian Government will think of utilising this material for developing amorphous silicon solar cells which are going to be a boon in the matter of solar cell application, particularly in the rural areas.

SHRI K. R. NARAYANAN; First *of all* with regard to the specific proposal of a silicon Plant, I think the intention of the company concerned is to manufacture only electronic grade and not solar cells. This is the proposal before us. So, there is no danger of their manufacturing solar cells and trying to sell them in the Indian market. As regard$ amorphous[1] technology and other technologies, We are constantly on the alert in | order to utilise the most advanced technology in the field of electronics. SHRI JASWANT SINGH: Mr. Chairman, Sir, there are two or three ! aspects of_this attempt at polysilicon which intrigues me and unfortunately the hon. Minister's reply has not so far really clarified the matter. There are existing indigenous efforts about. which I am not enquiring. Now, it has also been established that the Department of Electronics had some kind of an agreement with one corporation caller Hemlock Corporation for which a payment of 6. 7 million dollars has already been made. Now, it has also been decided that there will not be any import and that there will be indigenous production of polysilicon. That apparently has been put aside and the NRI angle has come into being through one Dr. Rajagopalan of indus technology. In fact, his attempt i_a to set this up by buying a plant from Aridona which has been decommissioned by the original com-• pany called motorla to which a Previous speaker has referred. He is buying that plant to bring it in India and is taking the technology of Hemlocks from the Department of Electronic which the DOE has already paid for. Therefore, I cannot understand why this special consideration is being 'shown (a) to Hemlocks-—the Department of Elecronics pays for it— and (b) why the NRI should buy the plant which has been shut down in the United States and bring it to India and pay for that with Indian money. Would the Minister please clarify these intriguing aspects along with other aspects? What is the existing | market for polysilicon in the country and what is the existing manufactur-

in, g capabilities of the indigenous companies?

SHRI K. R. NARAYANAN; sir, let me once again say that the Govern ment has not decided to accept the offer forgetting up the NRI plant. It is only under consideration. It has some favourable aspects irom the foreign exchange angle. Secondly, it is for exports and it will bring us foreign exchange through exports. - The total foreign exchange earning calculated is about 65 and odd crores of rupees. I may gay again that while there are some favourable aspects, we propose to look into the entire question taking into account all the aspects mentioned by the hon. Mem- . bers. We have not yet decided to ac cept this offer. With regard to indige nous production and requirement of silicon .....

. SHRI JASWANT SINGH; Linkage with Hemlock Motors.

MR, CHAIRMAN; Let him answer. If there is anything left over, I will ask.

SHRI K. R. NARAYANAN; As far as linkage is concerned, one is entirely for export and the othe$_r$ is a plant which is to be set up here. With regard to this plant also, while we have got the' technology from Hem- lock, we have not yet decided to set up the plant. This is still under the review of the Government. Why it is still under review is because we would very much like to encourage indigenous production of polysilicon. And for that purpose, we are giving every encouragement to the Metkem Corporation and giving them a chance to show their indigenous technology. And I want to say here that Metkem has made considerable progress in the indigenous technology for this. We are examining various things. Of course, this is a field where if. a proposal comes to Us which has seme favourable aspects, we do not wish to discard it, we would like to look at it carefully, investigate it before taking a decision.

MR. CHAIRMAN; What is. the size of the market in India for this polysilicon?

SHRI K. R. NARAYANAN: For photovoltaic, 1. 5 MWs of solar cells are required. For this, we will require 15 lakh wafers for which purpose, we will need about 33 tonnes of polysilicon. At the moment, Metkem produces three lakhs, of wafers. And two other factories, the Siltronics and the Super-semiconductor Limited produce two lakhs. So, five lakhs as against 15 lakhs is the current stake of production in India. So, we need for our immediate needs more photovoltaic solar cells.

DR. H. P. SHARMA; Sir, most of our consumption requirement would be in the direction of production of photovoltaic energy in the coming years. And for photovoltaic cells we do not need polysilicon of this high purity. Amorphous silicon will be mor$_e$ in the line of our consumption. It i$_s$ commercially viable Already, Arco, Solar and Sonyo of Japan have been putting up in the market photo voltaic cells based on amorphous silicon technology. So, Sir, my answer would be... *(Interruptions)*... my question would be, keeping in view the requirements of our country in the coming years, should we not direct all our efforts to the production of amorphous silicon technology?

SHRl K. R. NARAYANAN": We have to develop both because electronic-grade technology is the highest technology in the field. **And** if we can achieve the highest technology, we would hav$_e$ knowledge of producing products based on the lower tech- nology. Sc, our attempt is to develop both.

SHRI BIR BHADRA PRATAP SINGH; Mr. Chairman, Sir, let us develop every possibility. The question of resources is there and that is

why in the question it has been mentioned that the NRIs are attracted. Now their investment is attractive. One 'technology is being replaced by another technology. The whole question is what shall be the selection of specialization. Otherwise, this formulation of technological develop ment will be lost. So, may I draw the attention of the hon- Minister to this and know whether he will think particularly about the fields of specialisation and make efforts only in those fields or shall we take up overall development in every respeet?

MR CHAIRMAN; A very general question. Next Question.

Loses to Mazagon Dock Limited

*122. SHRI LAL K. ADVANI; Will the Minister of DEFENCE be pleased to state:

(a) whether it is a fact that the number of ship$_s$ repaired by Mazagon Dock Limited has come down from about 3, 000 a couple of years ago to around 600 now;

(b) whether it is also a fact that instead of earning the projected profits of Rs. 14 crores, the company suffered a loss of about Rs. 13 crores in 1984-85 and of about Rs. 20 crores in 1985-86; and

(c) if so, upon whom the responsibility has been fixed?

THE MINISTER OF STATE IN THE DEPARTMENT OF DEFENCE PRO-DUCTION AND SUPPLIES IN THE MINISTRY OF DEFENCE (SHRI SHIVRAJ PATIL); (a) to (c) A Statement is placed on the Table of the House.

Statement

(a) Ship repair task undertaken by Mazagon Dock Ltd. has come down from maximum ever of 846 ships in 1975-76. to 55 ships in 1985-86.

(b)' The Company suffered a net loss of Rs. 12. 94 crores in 1984-85 as againsit the projected profits of Rs. 16. 10 crore$_s$ and a net loss of Rs-

38. 97 crores in 1985-86 which includes Rs. 19. 61 crores on account of previous years' adjustments.

(c) Unsatisfactory perforomance of 'the top management of the Company resulted in deterioration and consequently, as corrective action, Government resorted to immediate removal of the then Chairman-cum-Managing Director and Director (Finance). It was also decided to replace the then Director (Offshore) as well as Director (Shipbuilding).

SHRl LAL K. ADVANI: Mr. Chair man, Sir, this statement itself adds up to a very candid confession that this State-owned ship-building and repairing company is in a very bad state of affairs. In part (c) of the answer, the Minister has told us that there has been unsatisfactory perfor mance of the top management of the company which has resulted in dete rioration and consequently, as correc tive action, Government has resorted the immediate removal of the then Chairman-cum-Managing Director and Director (Finance). It was also decided to replace the then Direc-loi (Offshore) as well as Director (Shipbuilding). This seeus to suggest that H is only the drawbacks, management, by the personnel that was responsible. I would like to know whether the Government has analysed wrong policy decisions made during that period which have contributed to this. And has it reviewed what changes need to be made in so far as policy is concerned particularly tho ambitious, venture into supply of offshore equipment instead of relying principally, as we did in the past, on repair work?

SHRI SHIVRAJ PATIL: Sir, Mazagon dock is building ships as well a supplying equipment needed by ONGC for offshore activities, in the area ship building Mazagon Dock has earned profits. Rut in the area of offshore activities it has incurred losses. And the losses were incurred because of many reasons. One of the most im-

portant reasons is the recession in the